

Material Safety Data Sheet

Soft-PLA

SECTION 1: Hazards Identification

1.1 Classification

Not dangerous according to Directive 67/548/EEC

1.2 Special advice on hazards

Danger of burns in contact with hot polymer. Hazardous vapours in case of burning.

SECTION 2: Composition/information on ingredients

2.1 Chemical characteristics

Biodegradable polymer-blend based on polylactic acid (PLA), contains a copolyester and additives. Compostable acc. DIN EN 13432

CAS no: PLA: 9051-89-2

Additional information: no harmful ingredients

SECTION 3: First aid measures

3.1 Skin contact

In case of contact with molten polymer immediately cool the skin with cold water. Medical aid may be required to remove adhering material and for treatment of burns.

3.2 Inhalation

After inhalation of decomposition gases or dust remove patient to fresh air. Contact a doctor in case of discomfort.

3.3 Ingestion

No effects known. Rinse mouth with water and drink more water. Contact a doctor in case of discomfort.

3.4 Eyes contact

Rinse open eyes thoroughly with water

SECTION 4: Firefighting measures

4.1 Suitable fire extinguishing media

water, dry chemical extinguisher, foam, carbon dioxide

4.2 Special exposure hazards

During incomplete combustion release of carbon monoxide, tetrahydrofurane and decomposition products possible.

4.3 Special protective equipment

Self-contained breathing apparatus

4.4 Remark

Accumulations of dust can be inflammable.

SECTION 5: Accidental release measures

5.1 Personal precautions

Use suitable protective clothing. Avoid eye contact and inhalation of dusts. Keep ignition sources away.

5.2 Methods for cleaning up

Sweep up material and place in a container, risk of slipping. Avoid ingress of material into drainage systems.

SECTION 6: Handling and storage

6.1 Handling

Avoid contact with molten polymer. Avoid generation of dust and electrostatic charge.

6.2 Storage

Protect against moisture. Store cool and keep packaging closed when not in use. Avoid sources of ignition.

SECTION 7: Exposure controls/personal protection

7.1 Technical safety measures

With suitable ventilation the threshold limits assumably will not be reached. Avoid electrostatic charge by use of grounding cables.

7.2 Personal safety equipment

Use adequate safety equipment, e.g. protective clothing, eye protection glasses, heat protection gloves. In case of dust formation wear mask with particle filter.

7.3 Work hygiene

No eating or drinking during working. Avoid contact of hot material with the skin. Avoid breathing dust and vapours.

Physical and chemical properties

Form:	Granules
Colour:	beige
Odour:	almost odourless
Melting temp.:	140 - 160° C
Oxidising properties:	not self igniting / flammable
Explosions limits:	not applicable
Density:	1,3 - 1,4 g/cm ³
Solubility in water:	insoluble

SECTION 8: Physical and chemical properties

8.1 Stability

The product is stable at recommended storage conditions.

8.2 Conditions to be avoided

Avoid exposure to extreme heat and all sources of ignition. Thermal decomposition >240°C.

8.3 Substances to be avoided

Strong oxidizing agents

8.4 Hazardous decomposition products

Carbon monoxide, carbon dioxide, aldehydes, tetrahydrofurane, low molecular weight oligomers.

SECTION 9: Toxicological information

9.1 Local irritation

Dust can cause irritation of eyes, respiratory organs and skin. After ingestion stomach pain or nausea are possible.

9.2 Other remarks

Based on our state of knowledge and experience no injurious health effects are expected if product is properly handled for the designated use.

SECTION 10: Ecological information

10.1 Ecotoxicological effects

No negative ecological effects known at the present state of knowledge, test results are not available. Due to insolubility in water most probably not hazardous to aquatic organisms.

10.2 Biological degradation

Product is biodegradable.

10.3 Bioaccumulation

Due to its consistency and insolubility in water biological accumulation is not expected.

SECTION 11: Disposal considerations

11.1 Product

Generation of waste should be minimised, check possibility for recycling. Waste product can be incinerated or dumped together with domestic waste in compliance with local authority requirements.

11.2 Uncleaned packaging

Packaging material has to be emptied completely and disposed in accordance with the regulations. Packaging can be recycled if not contaminated.

SECTION 12: Transport information

12.1 Transport regulations

Not classified as hazardous under transport regulations ADR, ADNR, RID, ICAO/IATA, IMDG/GGVSee, ICAO/IATA

SECTION 13: Regulatory information

13.1 EU regulations

This product does not require a hazard warning label in accordance with EC Directives.

13.2 Water exposure class

,nwg', no risk of water pollution (classification acc. Att. 1 of VwVwS)

SECTION 14: Other information

This data is based on the current state of our information and experience. This safety data sheet describes our product in terms of safety requirements. Preceding data is not applicable as a warranty of product properties.

It is the responsibility of the recipient to observe the existing legal regulations for the use of this product.

Orbi-Tech GmbH urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given.

Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.

SECTION 16: Emergency contact

Contact:

Contact person: Michael Elstner

Phone: +49 89 2488986 – 0

Mail: emergency@germanreprap.com